

Focus Newsreel continued....

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Radio Caroline continued....continuous music & an excessive amount of soul & top 40 music. The standard in programme presentation has also dropped from the professional standards in August & July. This cannot be blamed on Stuart & Roger though as they are long overdue for a shore-leave & must be very weary. Let's hope that by the time this mag' reaches you the two DJs have been replaced.

Radio Mi-Amigo. Since mid-August RMA's transmission hours have been extended by a couple of hours, closing now at 20.00 instead of 18.00hrs. The extra hours have been filled with non-stop music & jingles, but no adverts have been heard in this time slot.

During Mark Jacob's RMA lunch-time programme, Baken 16 (Buoy 16) he and Stuart Russell on Caroline have been linking up the two studios for a general chat & a bit of fun at 11.30.

On Sunday August 14th a joint programme went out between 17.00 & 20.00 on both Caroline, 319m (962kHz) & RMA, 212m (1412kHz). It included an interview from the Centre Airport Hotel at Heathrow, London where the "Flash-back '67" convention was being held. It was claimed that the interview which was being hosted by old Caroline DJ Robbie Dale, was being relayed live. In fact, it was recorded on the Saturday evening and was rushed out to the boat where it was edited. The police couldn't hear where it was edited apparently as they thought it was coming live from Heathrow & rushed round there to find no transmitter link with the Mi-Amigo!!! Other items on Caroline/RMA commemorating the 10th anniversary of the M.E.B.O. act included a tour of the ship (again!) and a reconstruction of midnight 14/8/1967 at midnight on Sunday 14/8/77!!

Mediterranean Offshore news. The Mebo II is now anchored off Benghazi, Libya after moving last month from Tripoli harbour. Meanwhile transmissions are continuing the same as printed in FRF15s Focus Newsreel. There's no sign yet of the rumoured English pop service in the evenings on 6205.....

....Abie Nathan, boss of the Voice Of Peace on 195m, 1595 off the coast of Israel has launched a new campaign for peace. He is encouraging Israeli children to smash their military toys. Those who agree to have their toys destroyed at a central collection point receive a scroll with the biblical quotation, "And they shall not learn war anymore." Abie is also offering to compensate shops who agree not to sell war toys anymore by buying their complete stocks of war toys. This item was taken from the Sunday Express, 7/8/77.....

Short Wave Landbased News; New Stations last month included.. R. Wonderland Int' on 14/8/77 on 6240. They gave out the IBA address which is.. PO Box 2, D-4440 Rheine, FRG. Programmes were in English & German. Music format varied from rock to soul album tracks.... On 21/8 another new station, using the IBA in Rheine address, was heard called European Music Machine on an off channel frequency of 6207. The format seemed similar to that of Wonderlands. RWI djs according to a German reader sound similar to those of Ch. 292.... Another new station heard during August was Skull 'n' Bones Radio System on 6265 & 6220. They used the FRF address (13, The Chase etc....) although they now inform us that they will use a more local address in Ireland where they are located. DJs are Al Steward, Gary St. John, Mick Taylor & The Freaky Phantom! Transmitter power is 40watts and transmission times are from 10-13.00hrs. The aerial is a 70' long dipole. All correct reports are verified by an attractive QSL card, an info' sheet & a poster. We don't know what their new address is yet & so meanwhile you can contact them via FRF... Radio Santana is a new Dutch SW station heard in August on 6215 & 6220 using the following address; PO Box 218, Almelo, 7600, NL. Let's hope that they do not follow the examples of fellow Dutch pirates who seem to have a lack of sufficient technical knowledge to operate on short wave (e.g. Mammoth, Verona, Black Shadow).... Other Short Wave news now.. ..Whilst many will sympathise with the operators of ABC England on the news of their raid I'm sure that many will rejoice on hearing the news that technical incompetents Radio Verona were raided recently near Eindhoven, Holland near their border with West Germany, they were in the back of a truck at the time of the raid..... Focus Newsreel cont'd on



"These ecologists' radio stations are very difficult to detect."



and other Ecological pirates!

In France recently, a pirate station has been gaining a vast amount of publicity, news items have also been in Britain's "New Scientist" magazine and on West German radio & in West German newspapers. The station is called "Radio Verte", (Green Radio in English!) and is run by the French version of "Friends of the Earth," (Amis de la terre).

The station has been transmitting from various locations in Paris, their first transmission taking place on 13th May 1977, reportedly from the home of a writer called Edern Hallier. The programme content consisted of a general feature on environmental issues and was heard over a 7 mile

radius. Transmissions are on 92MHz FM, power on initial transmissions was 10watts, although around 50watts was used in later transmissions.

After this first transmission police interviewed Hallier, but the "Ecologist Party" which operate the station is very popular, and any legal action taken against people concerned with the station will make the authorities very unpopular! The authorities would like to avoid this, as in the French municipal elections the ecologists met with a lot of success and they make it clear that they are to stand in the legislative elections next year, and any action against them would result in them gaining a lot of votes! The Ecologist party's main stand is over the development of nuclear power in France, which they are against.

The Ecologist party's second transmission the subsequent week (20/5) was jammed and was therefore inaudible. The affair has been turned into a human rights struggle with the French government & Brice Lalonde, leader of the French Friends of the Earth says he will fight for the human right to broadcast, possibly invoking the Helsinki agreement on human rights if the French government tries to put the station off the air!

Across the border meanwhile, in neighbouring Switzerland, another ecological pirate was operating earlier this year called, "Radio Active!" Again the programmes consisted of mainly anti-nuclear propaganda. The VHE transmissions were traced at the beginning of June by the Swiss authorities using a helicopter. The police found the transmitter in a rucksack in a car attended by several young people on a high location near a town called Solothurn.

Radio Verte must be given credit though for an original signature tune, it's an underwater recording of a whale! Mark Dezzani.
Many thanks to Andrew Botsford, Dietrich Orth, Offshore Echos France & New Scientist for supplying information for this article!

LANDBASED LONDON; The final part rounding up the events in the last year of medium wave free radio activity in the capital has been put back & will appear in FRF17. Meanwhile I'd like to take this opportunity to thank & congratulate the author of the series of articles, Ed of R. Celebration, for the fine work which has received a lot of favourable criticisms. Meanwhile the articles are being translated into Dutch for use in the 'Free Radio Magazine' Holland & into German for use in the KDKC magazine in Germany!

Radio Brief, no. 11 (Sept/Oct) is out now for 23p. inc' postage, or for 2 IRCs from; 8, Skardu Rd., Cricklewood, London NW2 3ER... It features all the latest news & articles on BBC, IBA & Offshore radio stations.

Our reproduction of Tower Radio's novel QSL card last month inevitably bought alot of comment from our readers! First off a letter against!.....
 .."You musn't think I'm prudish or something like that, but my opinion is that they(Tower R.) shouldn't use such a QSL card. Imagine for example a young DX-er's parent seeing this QSL of one of, 'These damned pirates.' This is one of the things giving Free Radio a bad image. As you stated yourself in FRF12's Focus Feedback in Steve Joen's letter, 'no obscenities.'" Rudi, West Germany..... Yet another against the QSL now!.....
 .."The Tower QSL was going a bit far, (what have half a dozen(Five, Ed!)) birds flashing their fannies all over a QSL got to do with Free Radio?) Mind you, I'm not really complaining, it's something different!" Andy Botsford.
 ..We'll return to Andy's letter in a moment but first a letter supporting the Tower R. QSL card!.."I think the best QSL card is Tower Radio's which has five very nice nude females on it. To me, full congratulations go to them!" David Williams, Southampton..... OK, back to Andy's letter in which he mentions a couple of other subjects..."Regarding Caroline jumping on the punk bandwagon(see FRF14's FF), how can she jump on a bandwagon when no other stations, (legal that is) will play the discs unless the Beeb(BBC) puts it's seal of approval on it, which it does only for the softer new wave bands..... May I speak up in favour of CB, this band would keep the SO's off 227metres & off the 48mb where they cause havoc by jamming, overmodulating etc... They can't even present a decent programme!" Andrew Botsford, Chesterfield. **Anyone willing to take over the CB section, Editor leaving for D/mark.**
 .."One thing I feel I must comment on is the increase in jamming type signals on the 48mb, which has occurred in the last few months. It seems to me that the authorities are turning to the lowest form of oppression, as they feel they are being beaten by the large number of stations which have been heard each Sunday the last few months. Perhaps a hint could be given that even the Rumanian service of Radio Free Europe is not jammed anymore, and may often be heard with good music programmes that aren't normally played on British legal stations.

It seems to me that the government should find a better way of spending the money, so pathetically wasted on fighting a cause that is so obviously benefitting everyone who supports it and causes no harm to anyone, except the BBC monopoly of national radio. Perhaps there would not be the thousands of unemployed school leavers such as me if they spent the money sensibly on worthwhile projects.".. Gary Hogg, Leeds.....
Letter From America!!! One of our regular readers, John Williams from Surrey

sent the following interesting letter whilst on holiday in the states.....
 .."As you may have guessed, there is no FR activity here. I certainly have not heard any, but I feel that if there is going to be any real FR activity here it will be semi-political. That is to say pro-liberal. Some people are getting a bit fed up of the control that the broadcasting companies exert over certain aspects of news coverage, but to a degree, this problem has been solved by the advent of P.B.S. (Public Broadcasting System). In the USA the pressure on the media comes from the advertisers, whereas in Britain it comes from the government. By the way there is no station here as good as Caroline, and I really mean that!

I was speaking to a bloke from the Washington & Lee University record shop, who'd been to Britain & said, "The little I heard of radio in GB was rubbish." He hadn't heard Caroline or any of the landbased pirates though.

With regard to University radio stations, W & L has one, WLUR 91.5MHz from 8pm-midnight local time on Saturdays & transmits American 'folk' music, it is heard all over the town & surrounding area. They also have their own TV station, Ch.9, although I'm not sure if it comes by cable or if it is transmitted, as this house is connected to the local cable co. which provides 2 channels of it's own; Ch.2 Local weather & Ch.4 Local messages-mainly aimed at visitors..as well as this it also provides 2 Washington DC(which is 150miles away)stations, WTTG & WDCA as well as ABC, NBC, CBS & 2 PBS stations. WTTG & WDCA are not network stations.".....
 Many thanks John for that very interesting letter, write to FF if you have anything to say about radio. Deadline for FRF17; Sat. 1/10/77.....

SW Landbased News continued...The KDKC DX Club in West Germany recently conducted a popularity poll on landbased pirates along the same lines as the annual FRF/FRW poll and the results were as follows; Best Station..... 1)R.Valentine Int'..2)Gemini/ABC England/Ch.292..3)R.Solent City Int'.....; Best progs...1)R.Valentine Int'..2)ABC England..3)Channel 292.....; Best QSL.....1)Channel 292.....2)Time Radio...3)Condor Radio.....; Worst Station)R.Verona Int'(suprise!!)2)R.Ali Baba..3)Freaks Radio.....; The Free Radio magazine in Holland are also organising a similar poll, the results of which are being published in October..Next year though there will be a joint FRF/FRW/FRM/KDKC & DDXLK European Popularity poll!.....
...Westside Radio in Dublin made a return in August without Doctor Don & with a new mailing address which is; 1, Streamstown, Malahide, Co. Dublin, Ire.. Their first return transmission was heard on Sunday 28/8/77 on 6210.....
...The station with the original name, R.Northsea Int' (LB) was raided recently although no further details are known, except that they really did have a 2kw transmitter!...R.Solent City & Britain R.Int' made a joint transmission using 1kw on the 28 & 29 of August on 6270kHz. On the 28th the programme content was barely audible due to very low modulation although the carrier signal was strong. On the 29th though the signal & modulation was very good although the transmission ended early due to technical problems...BRI meanwhile made headline front page news on the local Derbyshire Times. The article will be reprinted in FRF 16.....Here is a statement now from Radio Corsair operator, Roger Stevans, "RC has been up & down the 48mb to try & establish a permanent frequency. During the past few months we have been using various frequencies all of which have been used by some station or another. Corsair is a weekly station & therefore it is important for us to choose a permanent frequency unlike irregular stations, and so Corsair goes back to 6250 since RNI(LB) seems to have disappeared, transmitting time, 10-11.30hrs. Cheers, Roger Stevans."...Other stations with regular transmission dates are; 1st Sundays ABC England, 6270: 2nd Sundays, Tower R. (Freq' unknown), R.Maniac, 6240: 3rd Sundays, European Music R., 6265kHz: 4th Sundays, R.Zodiac Int' (Freq' unknown)..Also Skyport R. weekly on 6260..Other stations are urged not to use these above reserved frequencies on the stated dates and all stations are urged to listen to see if the freq' they plan to use is clear!.....
....As suggested in FRF15, R.Sunshine will be trying out the other end of the 49mb (i.e. 5.9MHz+) this is about the only other band that can be found on any receiver with short wave on. Tests from Sunshine will be on 5910 on Saturdays from 12.00-12.30hrs. For Sundays, Sunshine now use 6205 instead of 6235 which they said was too crowded (6205 isn't exactly clear! Ed.) They also state that they'll use 3998 for tests soon which is in the 75mb, they hope to test around 60m as well soon! 100 watts is used by Sunshine on SW...
....FRF/FORP member station Tower R. have been testing on 6280 & 6250 recently after midnight so as not to interfere with anyone!!.....
...Radio Maniac have recently rebuilt their transmitter so it now runs at 220watts instead of the previous 150w. Transmissions are on the 2nd Sunday of each month between 10-12.15hrs, the schedule is; 10..Kieth Allen (Mailbox) :: 10.45..Reinhold Mardorf (German) :: 11.30-12.15..Dennis More (Oldies.).....
....The DDXLK Hobby Pirate List no.3/77 is out now. It is a complete alphabetical directory of SW free radio stations giving details of schedule, power, DJs, address etc.. on each station. It also reprints photo's of station studios (in no.3 R.Sylvania's) & station QSLs (Partisan & Benelux in no.3)..It costs 2IRCs for one copy from; DDXLK, DK-8723 Løsning, Denmark..
...R.Partisan have two new QSL cards, their address; Postbus 41, Dedemsvaart 7700, NL.....R.Iris made a 1hr test on 28/8 on 6205 which was also occupied by R.Sunshine at the time. The dj was Uncle Albert! The transmission went out simultaneously on 95.7MHz in Amsterdam. Programmes from former RNI/Caroline DJ Bob Noakes can be expected soon!.....
That's all the Short Wave news this month, thanks to the following contributors to this column; (not in any order) Chris Cortez, Gary Day, Rudi, Ian Biggar, Gary Hogg, Roger Stevens, Alfred & José of FRM, Gary St. John, Dietrich, Johnny Drake, Roger Stafford, Erik Bjerre, R.Maniac, Tony Boreham, Captain Blackbeard. (Apologies to anyone omitted.)Medium Wave news on page 14.

Citizens' Band

Why is it Banned?

In the United States, you don't need to comply with stringent official requirements if you want to communicate with your friends by radio. Almost anyone there can qualify for a licence to transmit on the Citizen's Band.

IN THE UK at present, there are basically two ways in which you can operate radio communications equipment legally. You can either apply for an amateur radio transmitting licence, which can allow you to talk to other 'radio hams' world-wide on the short wave (HF) band, or, if you can show the Home Office that you need a radiotelephone system in connection with your business or profession, you can be granted a licence to use Post Office approved equipment on specific VHF and UHF wavebands. In the former case, you will have to take a moderately difficult technical examination and possibly a morse code proficiency test; and in the latter you will probably have to buy or rent fairly expensive equipment from a Post Office approved manufacturer and are normally restricted to short range (line of sight) communication.

Business and professional communications

A large number of organisations in Britain make use of two-way radio. A radiotelephone system enables taxi firms and maintenance companies to be informed about potential jobs without having to make a long and time-consuming journey back to the office. Three specific bands are allocated for this purpose by the Home Office (into which the former Minister of Posts and Telecommunications has been absorbed). They are: *Low Band VHF* (77-87MHz); *High Band VHF* (around 170MHz); and *UHF* (450-470MHz). Equipment is required to be Home Office approved. On purchasing a system, the communications equipment manufacturer will organise the application for a licence. The Home Office will then organise the allocation of a specific channel so as to cause the least possible interference with other users. The manufacturer will then fit the appropriate channel crystals into the base and mobile units, and will install the equipment in the user's vehicles and office.

Often, to give greater coverage, the base station unit will be installed at a geographically favourable site (VHF and UHF communications are restricted virtually to line-of-sight range) which is shared with other users on different

channels, and owned by the manufacturer. The user's office is fitted with a control unit linked to the site by Post Office landlines (high quality telephone lines). Setting up such an installation may take some months. Users are required to know the basic Radio Telephony procedures, and operators who misuse their gear may have their licence revoked. Maintenance is almost always carried out by the equipment manufacturer.

Amateur radio

In the early days of radio, the majority of transmissions were in the Low to Medium Frequency bands (Long and Medium waves), and amateur experimenters were allowed to use the higher



frequency 'Short-wave' bands, which initially were considered 'useless' for long range communication. The amateurs very quickly discovered that communication was possible over vast distances, even round the world, using very low power. Then, as the short wave (HF, VHF and UHF) bands became crowded with broadcast stations, these 'amateurs' were allocated a number of specific HF bands, including 'Top Band' (1.8-2.0MHz); '80 Metres' (3.5-4.0MHz); '40 Metres' (7.0-7.1MHz); '20 Metres' (14.0-14.35MHz); '15 Metres' (21.0-21.45MHz); '10 Metres' (28.0-29.7MHz); and several others at higher (VHF and UHF) frequencies, including the VHF 2-metre band (144-145MHz). Such users are expected to maintain their own gear, and often construct it themselves as well. For this reason, the Home Office requires that they take a technical examination, so that the licensing authority can be sure they will not cause interference to other radio users or to local TV receivers.

THE US CITIZENS' BAND

The US Citizens' Band was established in the late '50s when the Federal Communications Commission (FCC) allocated 23 'prime' channels to be used for two-way radio communication between private parties. The new channels came to be known as the 'Citizens' Band', and are situated at about 27MHz.

The uses of CB are limited only by the user's imagination. A building contractor can shuffle his equipment and cut down time cost by using CB to co-ordinate operations. The local wholefood co-op can organise van deliveries and call in with orders for far-flung retailers. Private citizens can contribute to emergency services and provide valuable additional communications links. Doctors, dentists and psychiatrists can receive urgent messages quickly. If you are a farmer, you can communicate with your co-workers scattered over your land. CB is even used at speedways as racing drivers communicate with their pit crews. Long distance truckers can keep in touch with their headquarters and can talk amongst themselves, collecting important news of traffic problems, and just relieving the dangerous boredom of freeway trucking.

CB certainly isn't the only type of two-way communications that these people could have, but it is certainly the most convenient and economical to license, purchase, and use.

On July 24, 1970, the FCC permanently established CB channel 9 as an emergency/monitoring frequency. For the first time, a vast network of over a million CB'ers with three million pieces of CB equipment became available to anyone seriously in trouble and in need of immediate assistance.

To obtain help, all the CB'er has to do is to put out a call on Channel 9, explain the difficulty and request aid. There are a few places on the North American continent where a motorist can travel without being in range of a channel 9 monitoring station or network.

The FCC's regulations concerning the use of CB are about the most liberal of any radio service. In fact, nearly anyone offering a good reason for needing a CB radio will be given a licence to operate up to 24 transceivers. CB rigs are easy to use, and are all FCC type-approved. The majority of CB dealers provide repair facilities, so there is no need for the CB'er to take a technical exam. In many ways CB provides the best of both: the Amateur and Industrial Communications worlds.

Why a British CB?

I believe there is a very good case for the allocation of a Citizen's Band in the UK. Its practical benefits for co-operatives and community ventures are obvious. And technically, it would be easy to establish.

In the US, CB equipment is available from most of the Japanese and American equipment manufacturers. Importation of such equipment into the UK is at present banned, as 27MHz is presently allocated for other purposes, about which more later. Over an initial period following the establishment of a British CB, import controls could be maintained to give the UK electronics industry a chance to go

into production, thus creating a large number of jobs and giving a much-needed boost to the industry. A typical 23-channel CB rig in the States costs under £100 and would thus be within the reach of a large number of potential users in the UK.

Technical proposals

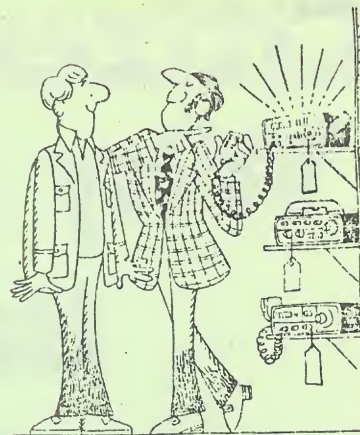
I would suggest the establishment of a UK Citizen's Band along the lines of the North American CB. The 27MHz band is at present allocated to radio-controlled models. In the States, only CB channel 23 (27.255MHz) is shared between CB and model control users. UK legislation should be introduced to allocate the 27MHz band to CB and model control users in the same way as in the US:

'Class C' (model control) is allocated to Channels (MHz): 26.995, 27.045, 27.095, 27.145, 27.255. 'Class D' (Citizens' Band) uses Channels 1-8 and 10-23 for use for communication between units of the same station, and Channels 10-15 and 23 between units of different stations

within the same system, although individual users would be allocated their own call signs.

It is only fair to point out that the CB situation in the States has become somewhat chaotic in some places. This, I believe, is due to insufficient control of sales and licensing. When a rig is bought in the States, it is left to the purchaser to apply for a licence. I would suggest that in the UK, the licence application should be filled out and the fee paid at the point of purchase. This would remove the possibility of unlicensed users. Licence renewal forms could be made available at Post Offices.

U.K. 7.



Hey, Good Buddy!

* THIS UNIT "FOR SALE" JUST IN THE COUNTRY FROM A TRIP TO SWEDEN ALL HOPEFUL BUYERS PLEASE WRITE THIS MAG, PLACING "UK 1" IN TOP LEFT HAND CORNER OF YOUR LETTER. NORMAL PRICE (wait for it £142) My PRICE £100

Full-power mobile includes portable carry case with battery pack...operates on car antenna & battery, or its own

Mounts under car, truck or boat dash, in or out of portable case—easily removed to carry with you for camping, hiking or security. Dual conversion superheterodyne receiver has automatic gain control, built-in automatic noise limiter. Transmits with up to 4 watts output on vehicle power; has hi/lo power switch for portable operation. 3-function meter shows battery condition/output power/signal strength. Includes speaker/microphone with coiled cord, telescoping antenna. Uses 12-volt power from vehicle (pos. or neg. ground). "AA" nickel cadmium or penlight cells (optional). 3 1/4" x 4 5/8" x 7 7/8". **MODEL 13-861**

The frequency 27.065MHz (Channel 9) is allocated solely for either emergency communications involving the immediate safety of life of individuals or the immediate protection of property, or communications necessary to render assistance to a motorist.

It will be noted that two channels are unallocated (27.235 and 27.245MHz). Whilst there appears to be no reason why these should not be allocated in the UK, in the interests of standardising equipment I would suggest that channel allocations be made as they are in the US. Alternatively they could be allocated to Model Control.

As UK model control equipment is currently operated on frequencies all over the 27MHz band, I suggest that, from the date of institution of a Citizens' Band, all new model control gear should be manufactured to operate on the allocated channels (as above), but existing equipment be permitted to use present channels for up to 15 years without change.

Licence fees could cost, say, £2.50 and be valid for a 5-year period. Call signs could be allocated on the basis of one call sign per system, in the form of three letters and four digits. A call sign GAA1234, for example, would apply equally to base stations and mobiles

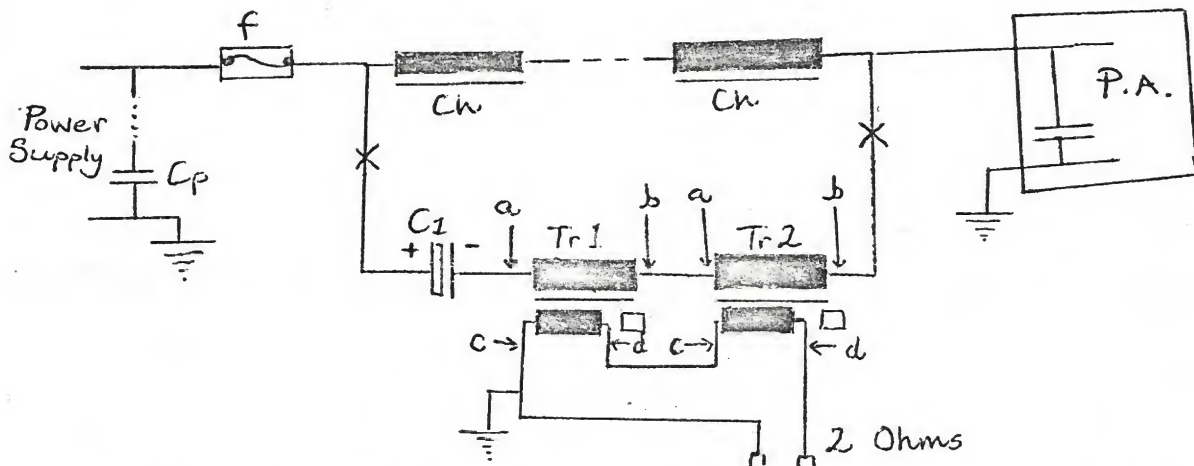


MIDLAND
INTERNATIONAL
Communications Division

**Unique New
Mobile/Portable
23-Channel CB**

Our antenna article was very popular & so we present another article in our technical forum;

" A Simple high quality modulation transformer for valve PA & 2ohm output."

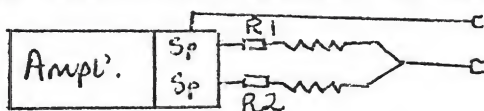


Key; $C_p = >20\mu F$ $C_1 = >20\mu F, >30v$ $a, b = 220v$ coiling $c, d = 6.3v$ coiling.
 $Ch =$ Choke $Tr 1/2 =$ Transformer $f =$ fuse, quick fuse, current as small as possible.

The transformers were taken from the power supplies of old valve radios, they shouldn't differ in value from those stated by more than 10%. The power that both the radios used (from which the transformers were taken) should be about the same as that of the RMS amplifier power.

The 2 or more chokes are about 2 or 3 Henry each. They must have a hollow former, these can be found in old television sets. The different windings of the transformers must have a high voltage capability, for Tr1 at least 1½ times & for Tr2 at least 3 times as much as the voltage of the power supply, (the high voltage may come from a cascade). Otherwise, a combination of capacitors and maybe resistors will have to be placed in the circuit where the X markings are. If this is done, 'a' of Tr1 will have to be earthed.

The amplifier should be indifferent to short circuits, if not the value of the resistors should be doubled at least.



To transformer.
 (Switch amp' to mono' operation.)

The resistors can be self made and must be equal, they should be at least 0.4 ohms each (for 8 ohms impedance, at least 0.8 ohms).

Usually, it is not necessary to open the circuit to the amp', when switching the P.A. you transform from 2 ohm to 2.5 kilo-ohms with a waste of about 15% in the aggregate.)

2 x 63w at 700v	0.27A=190w
2 x 46w at 600v	0.23A=140w
2 x 32w at 500v	0.19A=95w
2 x 20w at 400v	0.15A=60w
2 x 12w at 300v	0.11A=33w

The equation is;

$$\text{Power RMS} = \frac{u_{PA}^2}{5 \times 200} \quad \& \quad P_{rms} = 1300 \times i_{PA}^2$$

(u=voltage & i = current).

You will reach nearly 100% modulation degree as most amplifiers give away a relatively high amount of power, even when the impedance is higher.

The low frequency voltage will increase in a certain degree when the PA current is diminished, so you will also get an adaption of better than 90% when you reduce the current up to 25%. If your amp' does have 8 ohms per ch. you must not use this design, but you may try a combination of 4

continued on page ...

...mod' transformer continued.....transformers or other transformers.
The frequency range & distortion quality are very satisfactory with little difference to that of commercial stations!.....

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IMPORTANT NOTICE! Due to unavoidable delays at the printers this edition has reached, unfortunately, later than was planned, therefore there is a revised DEADLINE date for ALL contributions for FRF17, it is now.....
THURSDAY 20th OCTOBER 1977, (& not 1/10/77 as printed on previous pages of FRF.) We apologise for the delay.

A more important notice now...Due to an increase by the printer in the price of paper, Free Radio Focus as from No.17 will cost 20p per edition + an SAE or 3 IRCs..We hope that this will be the last increase for a very long time & hope that you think FRF will be worth 20p.

Consequently our subscription rate will also be increased from £1.40 for the UK & £1.60 for Europe to £1.70 for both Europe & the U.K. This covers 6 consecutive editions of FRF including postage & packing.

FRF 17 will be out at the beginning of November (& not mid-October as said earlier in the mag, due to a delay at the printers.).....

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Medium Wave Landbased News...London.. On BBC Television (BBC1) in early Sept. on the London area section of the programme "Nationwide" Radio Jackie were featured for 7 minutes. The setting up of the mobile transmission site & views of the studio were shown including interviews with RJ staff & DJs. It was stated that the authorities are presently taking a lenient attitude on RJ which has not been raided for 5 months now!.....
..The Punk station, Backstreet R. on 226m were last heard on Sat' 13/8 with a fair signal in the London area...R.Celebration's transmission on 235m, 1277kHz on 18/9 ended prematurely after complaints from neighbours!! A full report by one of the op's in FRF17!...A Radio Star has been heard in the London area recently on 1475 with a weak signal & poor programmes.....
R.Elaine made their pre-publicised transmission on Bank Holiday Monday, 29/8 on 199m, 1507kHz, signal was good in South London. Transmissions ended early though at 14.00 when the power supply unit decided to send out smoke signals!!...East London Radio's planned move to 235m in Sept. didn't go too smoothly as a station called Telstar 1 was also using this frequency & so ELR temporarily moved back to the former 201m, 1493kHz until something can be sorted out with Telstar. ELR's current programme schedule is; Week 1..11(BST) Norman Spencer (sweet music)..12. Paul Jones (Oldies)...13..Gary Lincoln (Top 40)...14. Ivor Biggan... (Albums)...15. Crispian McTavish!..... Week 2..11. Roger Davis, 12. Steve Anthony, 13. Dela Wear, 14..... Keith Leyrom, 15-16. The Red Baron... The two schedules are alternated each week.....
Kent North R. on 1190kHz, 253m have been suffering weekly raids usually after only 50 minutes of transmissions by the Kent Hom0 which consist primarily of Cecil Robert Targett in a scarlet Renault (Reg. no. KKL 822P), Sean Scannell in a Hillman Avenger (TKN 521N) & Dave Pritchard (MKJ 904P) & also Vic Brown pictured on the right, (we are informed that he has since had a haircut since this mugshot was taken!)...
HOLLAND MW NEWS...R.Mercury Int' (In Dutch: R. Mercurius) the biggest MW station broadcasting from Amsterdam will resume transmissions in September. They operate on 389m & for their 3/7/77 transmission, two reports were received from England (one from Grimsby).....



..Tom Cat R. one of the more popular Dutch MW stations among English listeners has stopped broadcasting, this time for good following complaints from neighbours who threatened to report him to the authorities & so he sold his transmitter. He regrets this very much & would like to thank all his listeners who can still write to him at PO Box 47, Oude Pekela, NL.....
London (again) R.Elaine reported above can now be contacted via; 13, The Chase, Crawley, Sussex.....

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